

EXHIBIT

A

PATENT CROSS-LICENSE AGREEMENT

This Patent Cross-License Agreement ("Agreement") is entered into as of October 1, 1998, by and between Siemens Metering Ltd. (which includes the former metering business of Landis & Gyr (Europe) AG) and Siemens Power Transmission & Distribution LLC (which includes the former metering business of Landis & Gyr Utilities Services, Inc.), a Delaware limited liability company (collectively "Siemens"), and ABB Power T&D Company Inc. ("ABB"), a Delaware corporation.

WHEREAS, Siemens and ABB desire to grant and obtain licenses under various patents as defined herein on the terms and conditions specified herein;

NOW THEREFORE, the parties hereto agree as follows:

1. Definitions

- 1.1 ABB Licensed Patents. "ABB Licensed Patents" shall mean the following patents: United States Patent Nos. 5,537,333; 5,544,089; 5,548,527; 5,555,508; 5,621,629; 5,631,843; 4,654,588; 4,852,030; 5,537,029; and, 5,457,621 and all continuations, divisionals, reissues and reexams of these patents or resulting from any common parent applications of these patents.
- 1.2 L&G/Siemens Licensed Patents. "L&G/Siemens Licensed Patents" shall mean the following patents: U.S. Patent Nos. 4,902,964; 4,987,363; and 5,262,715; and all continuations, divisionals, reissues and reexams of these patents or resulting from any common parent applications of these patents; and EPO Patent No. 524,378 and German Patent No. 94 14 256.4 U1 and all continuations, divisionals, extensions and renewals thereof.

- 1.3 (a) Net Sales Price. "Net Sales Price" means the gross sales price less the following items to the extent to which they are included in such gross sales or lease price: (i) trade and quantity discounts (but not cash discounts, advertising allowances, or commissions paid to any salesperson, sales agent or manufacturer's representative); (ii) transportation and insurance costs on shipments to the customer; and (iii) sales, use and other similar taxes.
- (b) Net Lease Price. "Net Lease Price" means the cumulative gross lease price payments less: (i) trade and quantity discounts (but not cash discounts, advertising allowances, or commissions paid to any salesperson, sales agent or manufacturer's representative); (ii) transportation and insurance costs on shipments to the customer; and (iii) sales, use and other similar taxes.
- 1.4 Running Royalty Period. "Running Royalty Period" shall mean the time period commencing July 15, 2000 and continuing through the end of the Term of this Agreement as defined in Section 3.1.
- 1.5 Licensed Products. "Licensed Products" means electric meters falling within the scope of the ABB Licensed Patents or kits or components specifically designed for use therewith.
- 1.6 Specific Licensed Product(s). "Specific Licensed Product(s)" means electric energy meters or kits or components specifically designed for use in such electric energy meters embodying one or more of the following features:
- (a) A programmable meter for electronically measuring electrical energy used by a residential, commercial or industrial customer, the meter comprising processing circuitry receiving voltage and current signals corresponding to at least two phase service, the processing circuitry

comprising 3 sigma delta ($\Sigma\Delta$) analog to digital (A/D) converters, a first $\Sigma\Delta$ A/D converter receiving only the voltage signals corresponding to each phase, a second $\Sigma\Delta$ A/D converter receiving only the current signals corresponding to each phase, and a third $\Sigma\Delta$ A/D converter used to simultaneously sample a voltage reference for a given phase or to simultaneously sample a phase different from the given phase for non-Blondel compliant applications.

(b) A programmable meter for electronically measuring electrical energy used by a residential, commercial or industrial customer, the meter comprising processing circuitry receiving voltage and current signals corresponding to at least two phase service, the processing circuitry comprising plural analog to digital (A/D) converters, each A/D converter having a conversion rate of 7200 Hz (+/- 10%), an A/D channel having a conversion rate of 2400 Hz (+/- 10%) or a digital resolution of 21 bits (20 bits plus sign).

(c) A meter for electronically measuring electrical energy used by a residential, commercial or industrial customer, the meter comprising first and second processors, the first processor receiving voltage and current inputs and determining energy based thereon and having an associated memory from which a program code is executed (program code being defined as DSP code resident in the meter that can be executed by the first processor during metering operations), the meter also comprising one or both of a communications medium for communicating externally with one of the processors and/or a non-volatile memory, the program code for the first processor being alterable (meaning providing a different meter functionality, e.g., ABB "Alpha Keys" and form changes) in the field (i.e., not in the factory) via either the communications medium or from program code stored

in the non-volatile memory, but specifically not including transferring program code from a non-volatile memory to executable code space (RAM) at initialization, providing that the program code is the same as at first initialization.

(d) A programmable meter comprising a first and second processor for electronically measuring electrical energy used by a residential, commercial or industrial customer, the meter having an interface to provide optional functionality to the meter, where the interface allows direct access to the information generated by the first processor in the meter, (e.g., #38, Figure 1, U.S. Patent No. 5,555,508) wherein direct access does not include an interface connected to the second processor as long as the interface only accesses information after it is processed by the second processor.

(e) A meter for measuring electrical energy having a power supply capable of accepting a range of input voltages and providing a substantially regulated output voltage independent of the input voltage, the power supply comprising a transformer and a switching regulator circuit operatively coupled to a primary winding of the transformer, there being a voltage clamping circuit receiving the input voltage, the voltage clamping circuit being operative to limit the voltage applied to the primary winding or the switching regulator circuit, but specifically not including a meter with a power supply using a voltage clamping circuit that is designed to regulate the voltage applied to the primary winding or switching regulator circuit only when transient over-voltages are present on the line, such as an MOV or surge protection circuit.

(f) A meter for electronically measuring electrical energy having a display comprising three annunciators that are each selectively actuatable to a visible

state and being arranged in a row, the first and the third annunciators in the row being arrow-shaped and being pulsed to the visible state at a rate corresponding to a rate of energy consumption, the second annunciator being pulsed at a rate corresponding to a rate of equivalent disk rotation.

2. Grant

- 2.1 ABB hereby grants, Siemens and its subsidiaries and affiliates, only as long as they are more than 50% owned by Siemens or a parent thereof, a nonexclusive license, with no right to sublicense, to make, have made, import, use, offer to sell, sell or lease Licensed Products and Specific Licensed Products.
- 2.2 No rights, express or implied, are granted under any foreign patents, foreign utility models, or foreign petty patents corresponding to any of the ABB Licensed Patents.
- 2.3 Siemens hereby grants ABB and its subsidiaries and affiliates, only as long as they are more than 50% owned by ABB or a parent thereof, a nonexclusive license, with no right to sublicense, to make, have made, import, use, offer to sell, sell or lease electric power meters under the L&G/Siemens Licensed Patents.

3. Term

- 3.1 The term ("Term") of this Agreement shall commence at the final execution hereof and continue through the expiration of the term of the last-to-expire of the ABB Licensed Patents.

4. Compensation

- 4.1 In consideration of the license granted herein to Siemens by ABB, Siemens shall make a single non-refundable payment to ABB in the amount of two million dollars (USD) (\$2,000,000.00) within five(5) business days of the date of final execution of this Agreement.
- 4.2 In further consideration of the license granted herein to Siemens by ABB, Siemens shall pay a running royalty to ABB at the rate of 5% of Net Sales or Lease Price of Specific Licensed Products manufactured, sold or leased by Siemens in the United States during the Running Royalty Period. The aforesaid running royalty shall be due and payable within thirty (30) days after the end of each calendar quarter and such payment shall be accompanied by a written royalty report setting forth the number of Specific Licensed Product(s) which have been sold or leased during the preceding quarter, the gross sales price, Net Sales Price of such products and the royalties due thereon or the gross lease price, Net Lease Price and the royalties due thereon.
- 4.3 In consideration of the license granted herein to ABB by Siemens, ABB shall grant Siemens a 2.5% credit against the 5% running royalty described in Section 4.2 throughout the Running Royalty Period. The net result of this credit is a 2.5% royalty on Net Sales Price or Net Lease Price of any Specific Licensed Products subject to royalty during the Running Royalty Period.
- 4.4 The parties agree that this net royalty rate of 2.5% shall apply throughout the Running Royalty Period regardless of any judicial or administrative determination that any of the patents licensed hereunder are invalid, unenforceable or not patentable.

4.5 During the Running Royalty Period, ABB shall have the right, upon reasonable notice and at its own expense, to have an independent third party acceptable to the parties conduct an annual audit of the sales records, royalty reports and like documentation of Siemens to verify the royalties due under this Agreement but this information shall be used for no other purpose and ABB shall maintain the confidentiality of this information.

4.6 Siemens agrees to keep accurate records and books of account covering all sales or leases made of Specific Licensed Product(s), all orders received for Specific Licensed Product(s), all discounts, transportation charges and taxes subtracted in determining the Net Sales Price or the Net Lease Price, and all Specific Licensed Product(s) in inventory at the close of each calendar quarter. Such records and books of account shall be retained for six years following the period to which they apply.

5. Assignment

5.1 This Agreement shall be binding upon and inure to the benefit of the successors and assigns of the parties to this Agreement. This Agreement shall not be assignable by ABB or Siemens, except that ABB and Siemens may assign at any time all of their rights and obligations under this Agreement to any of their parents or wholly-owned subsidiaries, provided, that the parties shall remain liable for the performance of all obligations under this Agreement.

6. Warranties and Representations

6.1 ABB warrants and represents that it has the legal right to grant the license set forth in Section 2.1. Siemens warrants and represents that it has the legal right to grant the license set forth in Section 2.3.

6.2 Preclusion of Patent Challenges

The parties agree that they will not seek to invalidate or render unenforceable the patents licensed herein, and the parties further agree that they will not take any action that would serve to encourage, finance, contribute or promote any third party or person to challenge or otherwise seek to invalidate or render unenforceable the patents licensed herein. However, nothing in this provision shall limit a party's right to rely upon prior art or prior activities for the purposes of construing the licensed patents or the terms of this Agreement.

7. Applicable Law and Jurisdiction

7.1 This Agreement and performance hereunder shall be governed by and construed in accordance with the laws of the state of Delaware (without giving effect to the conflict of laws principles thereof). Any and all proceedings relating to the subject matter hereof shall be maintained in the United States District Court for the District of Delaware ("District Court"), which court shall have exclusive jurisdiction for such purpose. ABB and Siemens hereby consent to the continued personal and subject matter jurisdiction of the District Court regarding the enforcement of this Agreement and the Settlement Agreement executed in connection therewith. ABB agrees that Siemens AG has not agreed to or consented to and is not subject to the jurisdiction of the federal, state or local courts of the United States of America for any purpose, including the enforcement of this Agreement and/or the Settlement Agreement.

8. Enforceability

8.1 If any provision of this Agreement shall be held to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions

shall in no way be affected or impaired thereby. If any provision is illegal, invalid or unenforceable, the parties shall, to the extent lawful and practicable, use reasonable efforts to enter into arrangements to reinstate the intended benefits of such provisions.

9. Entire Agreement

9.1 This Agreement and the Settlement Agreement executed in connection herewith contain the entire agreement between the parties hereto with respect to the subject matter hereof and thereof and supersedes all prior agreements and undertakings between the parties relating to the subject matter hereof and thereof.

10. Amendments and Waivers

10.1 All amendments and other modifications hereof shall be in writing and signed by each of the parties hereto. The failure of either party to exercise in any respect any right provided for herein shall not be deemed a waiver of any right hereunder.

11. Litigation

11.1 The parties agree that notice of any alleged breach of this Agreement shall be provided to the allegedly breaching party at least thirty (30) days prior to the filing of any litigation in connection therewith. The parties further agree that the allegedly breaching party shall have thirty (30) days following receipt of such notice to cure any such alleged breach, and that both parties shall engage in good faith discussions in an effort to amicably resolve any dispute prior to commencement of litigation thereon.

11.2 In regard to any claim by ABB concerning royalties due under this Agreement, ABB shall initiate any litigation against Siemens on such claim within two (2) years of the first sale within the Running Royalty Period of the product that is the subject of the royalty dispute. In any such litigation, (i) the prevailing party shall receive its reasonable attorneys' fees; and (ii) ABB shall be entitled to pre-judgment interest on the back royalties (if any) found to be due ABB in the amount of prime plus 5% in the event ABB prevails.

11.3 In regard to any other claim of breach of this Agreement, the party initiating such litigation shall do so within two (2) years of the occurrence of the alleged breach unless such breach is fraudulently concealed.

12. Remedies

12.1 ABB's sole and exclusive remedy for claims pertaining to royalties due hereunder is a suit for recovery of the monetary amounts specified in Section 11.2.

12.2 ABB's and Siemens' sole and exclusive remedy for any other alleged breach of this Agreement shall be a suit for recovery of such actual damages as are caused by such breach.

12.3 Nothing in this Agreement shall preclude the District Court from awarding any just and proper relief if it finds that either party acted in bad faith in connection with any dispute over the terms and conditions of this Agreement or the Settlement Agreement.

13. Termination

13.1 This Agreement is not subject to termination except by written consent of both parties, and the licenses granted hereunder are irrevocable.

14. Notices and Reports

All notices and reports required or permitted to be given by and between the parties under the provisions of this Agreement, shall be in writing and shall for all purposes be deemed to be fully given and received if sent by Registered Mail, postage prepaid, to the respective parties of the addresses:

To ABB:

Dr. John G. Reckleff
Vice President
ABB Power T&D Company Inc.
201 South Rogers Lane
Raleigh, NC 27610-2107

To Siemens:

John W. Shumar
Siemens Power Transmission & Distribution, LLC
100 Forsyth Hall Drive, Suite A
Charlotte, NC 28273
P.O. Box 240451
Charlotte, NC 28224-0451

Jan van Dokkum
Siemens Power Transmission & Distribution, LLC
7000 Siemens Road
Wendell, NC 27591
P.O. Box 29503
Raleigh, NC 27626-0503

Dr. Johannes Milde
Siemens Metering Ltd.
Feldstrasse 1
CH-6301 Zug